

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented): A process for the production of mono-dispersed, spherical, nonporous SiO₂ particles by hydrolytic polycondensation of tetraalkoxysilanes and/or organotrialkoxysilanes, said process comprising:

conducting said hydrolytic polycondensation of tetraalkoxysilanes and/or organotrialkoxysilanes in a medium comprising water, one or more solubilizers, and ethanolamine.

2. (Previously Presented): A process according to Claim 1, wherein a sol of primary particles is first produced, and the resultant SiO₂ particles are subsequently brought to the desired particle size in such a way that further nucleation is prevented by continuous metered addition of corresponding silane controlled to the extent of reaction.

6. (Previously Presented): A process according to Claim 1, wherein the proportion of ethanolamine in the medium is from 0.1 to 5% by weight.

7. (Previously Presented): A process according to Claim 1, wherein the one or more solubilizers are in each case an alcohol, a ketone, a dialkyl sulfoxide, a pyrrolidone, an alkyl nitrile, a furan, or a dioxane.

8. (Previously Presented): A process according to Claim 1, wherein the alkoxy group of the tetraalkoxysilane is in each case a methoxy, ethoxy, propoxy, butoxy or pentoxy group.

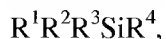
9. (Previously Presented): A process according to Claim 1, wherein the hydrolytic polycondensation is carried out at temperatures between 25 and 78°C.

10. (Previously Presented): A process according to Claim 1, wherein one or more

dyes are additionally added to the medium during the hydrolytic polycondensation.

11. (Previously Presented): A process according to Claim 10, wherein said dye is a fluorescent dye.

12. (Previously Presented): A process according to Claim 10, wherein said dye is a terminally silylated fluorescent dye of the formula:



in which

R^1 , R^2 and R^3 are identical or different and stand for halogen atoms, alkyl, aryl, alkoxy or silyloxy groups,

R^4 has the complex structure $A^1-B_m-C_n-A^2$,

m and n are each zero or 1,

A^1 is an alkylene chain or a heteroanalogous structure,

B is a functional sequence,

C is a bifunctional organic sequence having a chain or ring structure which is linked to A^2 , and

A^2 is a fluorophoric system or a dye molecule which is bonded to C or, if n is equal to zero, is bonded to B or, if m and n are both equal to zero, is bonded to A^1 .

13. (Previously Presented): A process according to Claim 12, wherein the functional sequence B in R^4 is carbonyl, oxycarbonyl, aminocarbonyl, aminothiocarbonyl, or a hetero atom.

14. (Previously Presented): A process according to Claim 12, wherein the bifunctional sequence C in R^4 is an alkylene unit, a substituted alkylene unit, or a heteroanalogous alkylene unit, which in each case is linked to A^2 via a carbon, nitrogen, oxygen or sulfur atom.

15. (Previously Presented): A process according to Claim 12, wherein the bifunctional sequence C in R^4 is a hydroxy- or aminocarboxylic acid radical, or an ester or

amide thereof.

16. (Previously Presented): A process according to Claim 12, wherein the alkoxy group is a methoxy, ethoxy, propoxy, butoxy or pentoxy group.

17. (Previously Presented): A powder consisting of mono-dispersed, spherical, nonporous SiO₂ particles obtainable by a process according to Claim 1.

18. (Previously Presented): A powder according to Claim 17, wherein the SiO₂ particles have a mean particle diameter of between 0.05 and 10 μm.

19. (Cancelled):

20. (Previously Presented): A process according to Claim 1, wherein the proportion of ethanolamine in the medium is from 0.5 to 2% by weight.

21. (Previously Presented): A process according to Claim 1, wherein the proportion of ethanolamine in the medium is from 0.5 to 3% by weight.

22. (Previously Presented): A process according to Claim 1, wherein the hydrolytic polycondensation is carried out at temperatures between 30 and 75°C

23. (Previously Presented): A process according to Claim 1, wherein the hydrolytic polycondensation is carried out at temperatures between 40 and 55°C.

24. (Previously Presented): A process according to Claim 13, wherein the functional sequence B in R⁴ is carbonyl, oxycarbonyl, aminocarbonyl, aminothiocarbonyl, oxygen, nitrogen or sulfur.

25. (Previously Presented): A process according to Claim 12, wherein m is 1, and the functional sequence B in R⁴ is carbonyl, oxycarbonyl, aminocarbonyl, aminothiocarbonyl,

or a hetero atom.

26. (Previously Presented): A process according to Claim 12, wherein n is 1, and the bifunctional sequence C in R^4 is a hydroxy- or aminocarboxylic acid radical, or an ester or amide thereof.

27. (Previously Presented): A process according to Claim 1, wherein said medium contains 2 – 25 % by weight water, 0.1-5 % by weight ethanolamine, 70-90 % by weight solubilizers, and 2-40 % by weight tetraalkoxysilane, based on the total weight of the medium.

28. (Previously Presented): A process according to Claim 1, wherein said medium contains 2 – 25 % by weight water, 0.5-3 % by weight ethanolamine, 70-90 % by weight solubilizers, and 5-15 % by weight tetraalkoxysilane, based on the total weight of the medium.